

CLAIMS

1. An optical output unit comprising:
 - an external information receiver for receiving external information
 - 5 representing a data transmitted from outside;
 - an optical output device for outputting light; and
 - an optical output controller for performing multistage control, wherein the controller makes the optical output device produce at least one mode of optical output among at least three different modes of the optical output according to
 - 10 the external information.
2. The optical output unit of claim 1, wherein the external information is composed based on a plurality of data transmitted from the outside.
- 15 3. The optical output unit of claim 1, wherein the optical output device includes optical output elements for outputting light,
 - the external information includes a mode data representing a kind of information and a data value indicating a magnitude of the information represented by the mode data, and
 - 20 the optical output controller controls optical outputs of the optical output elements according to the mode data and the data value included in the external information received by the external information receiver.
4. The optical output unit of claim 3 further comprising a mode data
- 25 storage for storing a mode data of the external information, wherein
 - the optical output controller gives a command to the optical output device for producing optical output only when the mode data included in the external

information received by the external information receiver has a predetermined relation to the mode data stored in the mode data storage.

5 5. The optical output unit of claim 4, wherein the optical output controller has a function of controlling the optical output in a plurality of methods,

the mode data storage stores optical output method identifiers for identifying respective methods of controlling the optical output in a correlating manner with the mode data, and

10 only when the mode data included in the external information received by the external information receiver has a predetermined relation to any of the mode data stored in the mode data storage, the optical output controller gives a command to the optical output device for production of the optical output according to one of the methods identified by an optical output method identifier corresponding to the mode data.

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6. The optical output unit of claim 1 further comprising an external information storage for storing the external information received by the external information receiver, wherein

20 the optical output controller controls optical output of the optical output device according to at least one of the external information stored in the external information storage and the external information received by the external information receiver.

7. The optical output unit of claim 1, wherein the optical output controller
25 gives a command for producing optical output in one level of intensity among at least three different levels in the multistage control.

8. The optical output unit of claim 1, wherein the optical output controller gives a command for producing optical output in one color of light among at least three different colors in the multistage control.

5 9. The optical output unit of claim 1, wherein the optical output controller gives a command for producing optical output in one mode of blinking among at least three different modes in the multistage control.

10 10. The optical output unit of claim 1, wherein the optical output controller gives a command for producing optical output in one way of turning a light source among at least three different ways of turning in the multistage control.

15 11. The optical output unit of claim 1, wherein the optical output controller gives a command for producing optical output in one area size of light source among at least three different area sizes in the multistage control.

20 12. The optical output unit of claim 1, wherein the external information includes information representing a speed of incoming data input through an input unit for data entry.

13. The optical output unit of claim 1, wherein the external information includes information representing an operating rate of a CPU.

25 14. The optical output unit of claim 1, wherein the external information includes a location data representing information on a location.

15. The optical output unit of claim 1, wherein the external information includes a positional data representing information on a place.

16. The optical output unit of claim 1, wherein the external information
5 includes a pressure data representing information on a pressure.

17. The optical output unit of claim 1, wherein the external information includes a heart rate data representing information on a heart rate.

10 18. The optical output unit of claim 1, wherein the external information includes a body temperature data representing information on a body temperature.

19. The optical output unit of claim 1, wherein the external information
15 includes a blood-sugar data representing information on a blood-sugar.

20. The optical output unit of claim 1, wherein the external information includes a health condition data representing information on a health condition.

20 21. The optical output unit of claim 1, wherein the external information includes a pH value data representing information on a pH value.

22. The optical output unit of claim 1, wherein the external information includes an angle data representing information on an angle.

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23. The optical output unit of claim 1, wherein the external information includes a rotational data representing information on rotation.

24. The optical output unit of claim 1, wherein the external information includes an electroencephalogram data representing information on electroencephalograph.

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25. The optical output unit of claim 1 having any of a cubic shape, a rectangular hexahedral shape and a spherical shape.

26. A repeater unit for receiving external information from the outside and
10 transmitting the external information to the optical output unit of claim 1, the repeater unit comprising:

an external information receiver for receiving an originator identifier for identifying an originator of the external information along with the external information;

15 a transmission management information storage for storing transmission management information containing a combination of a destination identifier for identifying a destination of the external information and the originator identifier;

a destination identifier acquirer for retrieving the destination identifier in
20 combination with the originator identifier from the transmission management information storage; and

an external information transmitter for transmitting the external information to the destination identified by the destination identifier.

25 27. A repeater unit for receiving external information from the outside and transmitting the external information to the optical output unit of claim 1, the repeater unit comprising:

an external information receiver for receiving a destination identifier for identifying a destination of the external information along with the external information; and

an external information transmitter for transmitting the external
5 information to the destination identified by the destination identifier.

28. A repeater unit for transmitting external information to the optical output unit of claim 2, the repeater unit comprising:

an external information receiver for receiving a plurality of the external
10 information;

an external information storage for storing the plurality of external information received by the external information receiver;

an external information composer for composing new external information representing a parameter used for optical control based on the plurality of
15 external information stored in the external information storage; and

an external information transmitter for transmitting the external information composed by the external information composer.

29. An information processing terminal for use in an information
20 processing system having the optical output unit of claim 1, the terminal comprising:

an external information acquirer for obtaining external information; and

a storage device for storing any of an originator identifier for identifying the information processing terminal and a destination identifier for identifying
25 a destination of the external information, wherein

the information processing terminal transmits the obtained external information together with any of the originator identifier and the destination

identifier stored in the storage device.

30. The information processing terminal of claim 29, wherein the external information includes a mode data and a data value.

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31. The information processing terminal of claim 29, wherein the external information acquirer comprises:

an input signal receiving section for receiving a signal of incoming data input through an input unit for data entry; and

10 an external information generating section for generating external information based on the input signal received in the input signal receiving section.

32. The information processing terminal of claim 29, wherein the external
15 information acquirer comprises a CPU operating rate acquiring section for obtaining an operating rate data representing information on an operating rate of a CPU, and

the external information includes the operating rate data.

20 33. The information processing terminal of claim 29, wherein the external information acquirer comprises a location data acquiring section for obtaining a location data representing information on a location of the information processing terminal, and

the external information includes the location data.

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34. The information processing terminal of claim 29, wherein the external information acquirer comprises a positional data acquiring section for obtaining

a positional data representing information on a place where the information processing terminal is placed, and

the external information includes the positional data.

5 35. The information processing terminal of claim 29, wherein the external information acquirer comprises a pressure acquiring section for obtaining a pressure data representing information on a pressure applied to the information processing terminal, and

the external information includes the pressure data.

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36. The information processing terminal of claim 29, wherein the external information acquirer comprises a heart rate data acquiring section for obtaining a heart rate data, and

the external information has includes the heart rate data.

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37. The information processing terminal of claim 29, wherein the external information acquirer comprises a body temperature data acquiring section for obtaining a body temperature data, and

the external information includes the body temperature data.

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38. The information processing terminal of claim 29, wherein the external information acquirer comprises a blood-sugar data acquiring section for obtaining a blood-sugar data, and

the external information includes the blood-sugar data.

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39. The information processing terminal of claim 29, wherein the external information acquirer comprises a health condition data acquiring section for

obtaining a health condition data, and

the external information includes the health condition data.

40. The information processing terminal of claim 29, wherein the external
5 information acquirer comprises a pH value acquiring section for obtaining a pH
value, and

the external information includes the pH value.

41. The information processing terminal of claim 29, wherein the external
10 information acquirer comprises an angle data acquiring section for obtaining an
angle data representing information on inclination of the information
processing terminal, and

the external information includes the angle data.

15 42. The information processing terminal of claim 29, wherein the external
information acquirer comprises a rotational data acquiring section for obtaining
a rotational data representing information on rotation, and

the external information includes the rotational data.

20 43. The information processing terminal of claim 29, wherein the external
information acquirer comprises an electroencephalogram data acquiring section
for obtaining an electroencephalogram, and

the external information includes an electroencephalogram data
representing information on the electroencephalogram.

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44. The information processing terminal of claim 29 having any of a cubic
shape, a rectangular hexahedral shape and a spherical shape.

45. A computer-readable program for controlling an optical output unit,
the program comprising the steps of:

receiving external information transmitted from the outside; and
5 controlling optical output in a multistage mode according to the external
information.

46. The program of claim 45, wherein the external information includes a
mode data representing a kind of information and a data value indicating a
10 magnitude of the information represented by the mode data, and

the step of controlling optical output is carried out according to the mode
data and the data value.

47. The program of claim 45, wherein the step of controlling optical output
15 is carried out by a command of directing optical output provided only when a
mode data included in the external information received in the step of receiving
external information has a predetermined relation to another mode data stored
beforehand.

20 48. The program of claim 47 further comprising a step of storing an optical
output method identifier for identifying each of optical output methods in a
correlating manner with the mode data, and

the step of controlling optical output is carried out by a command of
directing optical output according to one of the optical output methods
25 identified by an optical output method identifier corresponding to the received
mode data.

49. The program of claim 45 further comprising a step of storing at least a part of the external information received in the step of receiving external information, and

the step of controlling optical output is carried out according to at least
5 one of the external information stored in the step of storing the external information and the external information received in the step of receiving external information.